

Appl. No.: 10/047,054
Amdt. dated 07/06/2005
Reply to Office action of February 14, 2005

Amendments to the Claims:

1. (Currently Amended) An arrangement in a paper machine for measuring properties of a moving paper web having a predetermined width, which arrangement comprises:
measuring means for measuring properties of a paper web, and
an unmoving plane-like support surface for supporting the paper web in connection with the measuring means, the plane-like support surface extending substantially over the whole width of the paper web in the cross-direction relative to the direction of travel of the paper web and defining at least one opening therein extending substantially over the whole width of the paper web,
the measuring means being arranged to measure properties of the paper web through the plane-like support surface through the opening.

2. (Cancelled)

3. (Cancelled)

4. (Original) An arrangement according to claim 1, wherein the opening has a transparent cover.

5. (Currently Amended) An arrangement according to claim 1, wherein the support surface is arranged in a paper machine for measuring properties of a moving paper web having a predetermined width, which arrangement comprises:

measuring means for measuring properties of a paper web, and
an unmoving plane-like support surface for supporting the paper web in connection with the measuring means in such a way that the paper web is substantially not in contact with the support surface, the plane-like support surface extending substantially over the whole width of the paper web in the cross-direction relative to the direction of travel of the paper web and defining at least one opening therein.

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the measuring means being arranged to measure properties of the paper web through the plane-like support surface through the opening.

6. (Original) An arrangement according to claim 5, wherein the plane-like support surface is at least partly curved in such a way that the air brought along by the paper web forms an air layer between the paper web and the plane-like support surface.

7. (Original) An arrangement according to claim 6, wherein the plane-like support surface is provided with pressure-measuring holes, and that the arrangement comprises means for measuring the pressure in the air layer for the purpose of defining the tension of the paper web.

8. (Original) An arrangement according to claim 1, wherein in connection with the plane-like support surface, air blow means are arranged for blowing air between the plane-like support surface and the paper web.

9. (Currently Amended) An arrangement according to claim 1, wherein the plane-like support surface is provided with at least one additional measuring hole for single measurements.

10. (Original) An arrangement according to claim 9, wherein in connection with the measuring hole, means are arranged for measuring the temperature of the paper web in the vicinity of the paper web.

11. (Currently Amended) An arrangement according to claim 1, wherein in a paper machine for measuring properties of a moving paper web having a predetermined width, which arrangement comprises:

measuring means for measuring properties of a paper web, the measuring means comprise comprising at least one measuring transmitter and at least one measuring receiver, and

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an unmoving plane-like support surface for supporting the paper web in connection with the measuring means, the plane-like support surface extending substantially over the whole width of the paper web in the cross-direction relative to the direction of travel of the paper web and defining at least one opening therein,
the measuring means being arranged to measure properties of the paper web through the plane-like support surface through the opening.

12. (Original) An arrangement according to claim 1, wherein the measuring means are arranged to measure properties of the paper web by means of transmission measurement.

13. (Original) An arrangement according to claim 1, wherein at least one measuring means is arranged to be moved back and forth in the cross-direction relative to the direction of travel of the paper web.

14. (Currently Amended) ~~An arrangement according to claim 1, wherein the plane-like support surface is provided with~~ in a paper machine for measuring properties of a moving paper web having a predetermined width, which arrangement comprises:

measuring means for measuring properties of a paper web, and
an unmoving plane-like support surface for supporting the paper web in connection with the measuring means, the plane-like support surface extending substantially over the whole width of the paper web in the cross-direction relative to the direction of travel of the paper web and defining at least two openings successively in the direction of travel of the paper web,
the measuring means being arranged to measure properties of the paper web through the plane-like support surface through the opening.

15. (Original) An arrangement according to claim 14, wherein in connection with each opening, measuring means are arranged.